

Amendments to the Claims:

Claims 1 – 14 (canceled)

Claim 15 (new) An antimicrobial and non-cytotoxic coating on a device, said coating comprising:

- a) a biocide layer containing a biocidal agent, the biocidal agent is selected from the group comprising silver, copper and zinc, their ions and metal complexes, mixtures and alloys, the biocidal layer having a mean thickness of 5 – 100 nm and
- b) a transport control layer covering the biocide layer, the transport control layer having a mean thickness of 5 – 500 nm.

Claim 16 (new) The antimicrobial and non-cytotoxic coating of claim 20 wherein the biocidal layer further comprises gold, gold ions, platinum, platinum ions, palladium, palladium ions, iridium, iridium ions, tin, tin ions, antimony, antimony ions, a complex comprising one of the group consisting of gold, platinum, palladium, iridium, tin, and antimony, and an alloy of the biocidal agent with at least one of the group consisting of gold, platinum, palladium, iridium, tin, and antimony.

Claim 17 (new) An antimicrobial and non-cytotoxic coating material, comprising:

- a) a biocide layer containing a biocidal agent, and
- b) a transport control layer covering the biocide layer, having a thickness and porosity selected to release an antimicrobial and non-cytotoxic quantity of the active biocidal agent out of the biocide layer and through the transport control layer.

Appl. No.: Not yet assigned
Filed: May 17, 2006
Amdt. dated 05/17/2006

Claim 18 (new) The coating material according to claim 17, characterised in that the transport control layer has a gas permeability for oxygen (O_2) in the range between 100 and 1000 (cm^3 bar) / (day m^2).

Claim 19 (new) The coating material according to claim 17, wherein the biocidic agent is an inorganic biocide.

Claim 20 (new) The coating material according to claim 19, wherein the biocidic agent is selected from the group comprising silver, copper and zinc, their ions and metal complexes, and alloys.

Claim 21 (new) The coating material according to claim 19, wherein the biocidic agent has a mean particle size of 5 – 100 nm.

Claim 22 (new) The coating material according to claim 20, wherein the biocidic layer further comprises: gold, platinum, palladium, iridium, tin, antimony, their ions, their metal complexes, and alloy of the biocidic agent with at least one of the group consisting of gold, platinum, palladium, iridium, tin, and antimony.

Claim 23 (new) The coating material according to claim 17, wherein the transport control layer has a substrate material that is selected from the group consisting of

- a) an organic substrate material, and
- b) an inorganic substrate material.

Claim 24 (new) The coating material according to claim 23 wherein the transport control layer organic substrate material is selected from the group consisting of a plasma polymer, a sol-gel, a varnish, a lacquer, and a siliconised substrate material.

Appl. No.: Not yet assigned
Filed: May 17, 2006
Amdt. dated 05/17/2006

Claim 25 (new) The coating material according to claim 23 wherein the transport control layer inorganic substrate material is selected from the group consisting of silicon dioxide, silicon carbide, a metal oxide, and a non-biocidal metal.

Claim 26 (new) The coating material according to claim 23 wherein the transport control layer inorganic substrate material is selected from the group consisting of titanium oxide and aluminum oxide.

Claim 27 (new) The coating material according to claim 23 wherein the transport control layer inorganic substrate material is selected from the group consisting of titanium and medical stainless steel.

Claim 28 (new) The coating material according to claim 23, wherein the transport control layer has a silicon content of 20 – 60%, a carbon content of 10 – 30% and an oxygen content of 30 – 50%.

Claim 29 (new) The coating material according to claim 17, wherein the biocidal layer has a mean thickness of 5 – 100 nm.

Claim 30 (new) A coating material according to claim 17, wherein the transport control layer has a mean thickness of 5 – 500 nm.

Claim 31 (new) The coating material according to claim 17 wherein said transport control layer has a gas permeability for oxygen (O₂) in the range between 500 and 700 (cm³ bar) / (day m²).

Claim 32 (new) A method for coating a body with an antimicrobial and non-cytotoxic material comprising:

- a) applying a biocide layer containing a biocidal agent to said body; and

b) applying a transport control layer on said body with a biocide layer, said transport control layer having a thickness and porosity effective to permit the release of a quantity of said antimicrobial and non-cytotoxic into said transport control layer.

Claim 33 (new) The method of claim 32 wherein said body is selected from the group consisting of a catheter, a wound covering, a contact lens, an implant, a medical nail, a medical screw, a bone fixation nail, a dental implant, a medical instrument, a sanitary product, packaging for a medical product, packaging for a sanitary product, and a surface designed to contact a foodstuff.

Claim 34 (new) The method of claim 16 wherein said transport control layer has a gas permeability for oxygen (O_2) in the range between 100 and 1000 ($cm^3 \text{ bar} / (\text{day } m^2)$).

Claim 35 (new) The method of claim 16 wherein said transport control layer has a gas permeability for oxygen (O_2) in the range between 500 and 700 ($cm^3 \text{ bar} / (\text{day } m^2)$).